

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Application of

NORTHERN SOUND File No. BPED-860811MJ
PUBLIC RADIO

For Construction Permit for a New
Noncommercial Educational FM Station
on Channel 219A in Bellingham,
Washington

MEMORANDUM OPINION AND ORDER

Adopted: June 8, 1989;

Released: July 13, 1989

By the Commission: Commissioner Dennis dissenting
and issuing a statement.

1. The Commission has under consideration the above-captioned application of Northern Sound Public Radio (NSPR) for a major amendment to its pending application (File No. BPED-860115MC) for a new noncommercial educational FM station on Channel 217A in Bellingham, Washington. The amendment proposes changing the broadcast channel from 217A to 219A. This major amendment resulted from a request by the Mass Media Bureau (Bureau) that NSPR search for a channel on which its proposed facility would receive less interference from Canadian allocations once those allocations were applied for and the facilities became operational.

2. NSPR's selection of Channel 219A is the culmination of a search which began in 1980 to overcome the severe preclusionary restrictions to FM stations in the Bellingham area caused by the large number of FM channels assigned to Canada under the current *Working Arrangement for the Allotment and Assignment of FM Broadcasting Channels 201-300 Under the Canadian-U.S. FM Broadcasting Agreement of 1947* (adopted September 7, 1984) ("*Working Arrangement*"). Under the *Working Arrangement*, Canada received allocations on numerous channels in the noncommercial band along the western Canadian-American border, thereby assuring interference problems with virtually any proposed U.S. station in the noncommercial band. NSPR's first proposal, submitted informally by letter dated August 12, 1980, was to build a Class C facility on Channel 211. By letter dated November 3, 1980, the then Broadcast Bureau deemed the proposal unfeasible because it would cause unacceptable interference to Canadian allocations and suggested that NSPR instead consider building a low power facility. In response, NSPR proposed to construct a Class A facility on Channel 217 (File No. BPED-860115MC). Although this plan would protect all relevant Canadian allocations and had received Canadian concurrence, the Bureau advised NSPR that, due to its proximity (52.1 km) to the Victoria/Saturna Island, British Columbia (BC), co-Channel 217C allocation, NSPR's proposed facility might receive substantial interference if Canada constructed a station at full facilities on the presently vacant co-channel.

The Bureau requested NSPR to search for a channel that would receive less interference from Canadian allocations when fully activated. NSPR then submitted the above-captioned major amendment to build its proposed Class A facility on Channel 219.¹ NSPR's proposed operation on Channel 219 is also subject to interference, due to its proximity (56.6 km) to co-channel Class A station CBYF, Chilliwack, BC, but to a lesser degree than would have resulted from operation on Channel 217.² Inasmuch as interference to the reception of NSPR's proposed facility is predicted within its proposed 1 mV/m contour, a condition prohibited by Section 73.509 of the Commission's Rules,³ NSPR has requested a waiver.⁴

3. The 40 dBu (0.1 mV/m) contour of station CBYF completely encompasses the proposed NSPR 60 dBu (1 mV/m) contour. However, engineering studies provided by the applicant demonstrate that, despite this overlap, there exists an "interference-free" area within the proposed NSPR 60 dBu contour. This interference-free service area encompasses a population of 17,986 persons, which comprises nearly 50 percent of the population within the proposed NSPR 60 dBu contour. In the applicant's exhibits, the Commission's F(50,10) and F(50,50) propagation curves were used to determine the interference-free area. For relatively rough terrain profiles, or for paths with substantial amounts of shadow loss, this technique yields a "worst case" prediction of interference field intensity values (*i.e.*, it tends to predict values higher than those which are likely to be encountered in practice). Since the terrain between the CBYF site and Bellingham is rough and mountainous, the applicant supplemented this analysis by utilizing diffraction loss calculations along paths between CBYF and Bellingham. Using this analysis, the applicant concludes that the actual interference area produced by CBYF within the proposed NSPR 60 dBu contour is likely to be much smaller, and the interference-free area is likely to be much larger, than the areas depicted in the "worst case" analysis.

4. Waiver of Section 73.509 to the extent requested in this case is warranted only upon the most compelling of justifications. In the instant case, as discussed *supra*, the numerous Canadian allocations in the noncommercial band preclude implementation of any interference-free proposal in the Bellingham area. An exhaustive channel study of the noncommercial band conducted by the Bureau indicates that Channel 219 will receive the least amount of interference of the noncommercial channels.⁵ Further, a study of the commercial band performed by the Bureau shows that no channel in the commercial band can be utilized due to short-spacing problems. Given the lack of alternative commercial frequencies and the Canadian preclusion of the noncommercial frequencies, NSPR believes, and we concur, that despite the interference received, Channel 219A is the best possible channel on which NSPR can operate. In addition, the preclusionary effect of NSPR's proposed station is minimal due to Bellingham's severely isolated geographic location.⁶ Thus, although we would normally deny waivers of Section 73.509 of this magnitude, due to the extraordinary set of circumstances that exist in this case, we believe that adequate justification exists to warrant a waiver.

5. Accordingly, IT IS ORDERED, That NSPR's request for waiver of 47 C.F.R. Section 73.509 IS GRANTED, and that its application for a new noncommercial educational station on Channel 219A in Bellingham, Washington, IS GRANTED.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

FOOTNOTES

¹ NSPR's present proposal does not meet the minimum distance spacing requirements of the *Working Arrangement* with respect to co-channel Class A station CBYF, Chilliwack, BC, and to allocations on: co-channel 219A, Squamish, BC; second adjacent Channel 217C, Victoria/Saturna Island, BC; and second adjacent Channel 221C, Victoria, BC. However, full activation of all three allocations will not cause interference to NSPR's proposed operation on Channel 219A. By letter dated October 14, 1986, Canadian concurrence was granted for the proposed short-spaced operation on Channel 219A, provided that the NSPR interfering contour not extend into Canadian territory. NSPR's proposal meets the Canadian requirement. The 34 dBu contour of the proposed facility does not cross the Canadian border and therefore will not create prohibited interference to either licensed or allocated Canadian facilities.

² NSPR's operation on Channel 217 would have been located 52.1 km from a co-channel Canadian Class C allocation, whereas its proposed operation on Channel 219 is located 56.6 km from a co-channel Canadian Class A licensed facility.

³ Section 73.509(a) provides, *inter alia*, that no educational FM application will be accepted for filing if the requested facility would receive interference within its proposed 1 mV/m contour.

⁴ In the *Memorandum Opinion and Order* in MM Docket No. 20735, 50 Fed. Reg. 27954 (1985), the Mass Media Bureau was given authority to waive, when warranted, overlap received by noncommercial educational FM applicants when approximately 10% or less of the proposed service area (1 mV/m contour) is affected. Waiver of greater amounts of overlap received must be approved by the Commission.

⁵ As discussed *supra*, NSPR's proposal to operate on Channel 219A, while short-spaced to three Canadian allocations and Class A licensed facility CBYF, Chilliwack, BC, will not receive interference from the allocations even when fully activated and will only receive interference from Class A station CBYF. NSPR's proposal would receive a greater degree of interference if it were to operate on any other channel in the noncommercial band.

⁶ To the north and west lies Canada; to the south and southwest lies Puget Sound; and to the east and southeast lies mountainous terrain which is likely to remain sparsely populated.

DISSENTING STATEMENT

OF

COMMISSIONER PATRICIA DIAZ DENNIS

In re: Request for waiver of 47 C.F.R. Section 73.509 by applicant for construction permit for a new noncommercial educational FM station on Channel 219A in Bellingham, Washington

I respectfully dissent from the Commission's grant of this waiver. I sympathize with Northern Sound Public Radio's long-standing struggle to find an acceptable frequency and recognize the value of providing NPR service and other noncommercial programs to Bellingham. Yet,

as valuable as the new service might be, the circumstances of this case are not so unusual as to warrant a sweeping waiver of our rules prohibiting contour overlap. The proposed station will provide no first or second aural service, no first or second local service, nor even a first noncommercial educational service. Bellingham currently has two local commercial FM stations and four local AM stations, as well as a noncommercial FM station operated by Western Washington University.

Our rule prohibits *any* overlap of a proposed station's 1 mV/m contour with the 0.1 mV/m contour of another co-channel station. 47 C.F.R. 73.509(a). We have granted waivers of this rule only upon the most compelling of justifications and, generally, for overlaps of less than ten percent. This case, however, presents a 100% overlap; the 1 mV/m contour of the proposed Bellingham station will be entirely encompassed by the 0.1 mV/m contour of a co-channel Class A station in Canada. Allowing such massive contour overlap undermines the integrity of our rules against interference. Therefore, I must reluctantly dissent.